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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,232	03/28/2006	Yasunori Ito	36856.1417	5208

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Reston, VA 20191

EXAMINER
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SAN MARTIN, JAYDI A

ART UNIT	PAPER NUMBER
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2837

NOTIFICATION DATE	DELIVERY MODE
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09/24/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

## Application No.

10/595,232

## Applicant(s)

ITO ET AL.

## Examiner

J. SanMartin

## Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 10 and 12-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17 and 18 is/are allowed.
- 6) ☒ Claim(s) 10, 12, 13, 16, 19 and 20 is/are rejected.
- 7) ☒ Claim(s) 14 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6/4/09
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Allowable Subject Matter***

1. Prosecution on the merits of this application is reopened on claims 10-19 considered unpatentable for the reasons indicated below.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 10, 12-13, 16, 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Asakura (JP 11-111554).
4. Regarding claim 10, in figure 2, Asakura discloses a lamination-type resistance element (41) comprising:

a laminated sinter having a plurality of ceramic resistance layers (22) and a plurality of internal electrodes (28-31, 23-24, 42-45) laminated therein; and

a first external electrode (26) and a second external electrode (27) provided on the outer surface of the laminated sinter; wherein

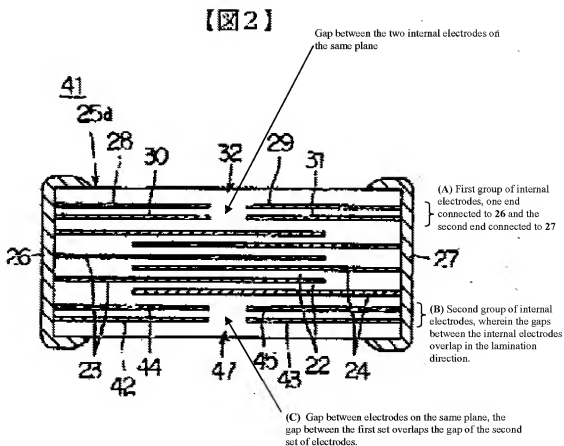
the plurality of internal electrodes includes a plurality of internal electrodes of a first group (28-31) and a plurality of internal electrodes of a second group (42-45);

each of the plurality of internal electrodes of the first group includes a resistance unit in which at least two internal electrodes are disposed so as to face each other through one of the ceramic resistance layers (electrode 28 faces electrode 30 through the ceramic layer formed

between them), a first end of the resistance unit is electrically connected to the first external electrode (26), and a second end is electrically connected to the second external electrode (27);

each of the internal electrodes of the second group (A, please refer to the figure below) includes a plurality of pairs of internal electrodes (42-45) in which a first end of one electrode faces a first end of the other electrode with a gap therebetween (C) on the same plane inside the laminated sinter, one internal electrode in each pair is electrically connected to the first external electrode, and the other is electrically connected to the second external electrode (42 and 44 are connected to 26; 43 and 45 are connected to 27) and

the gaps between the first ends of each of the plurality of pairs of internal electrodes of the second group overlap with each other in a lamination direction of the laminated sinter (C, refer to the figure below).



5. Regarding claim 12, note that internal electrode 28 faces 29 with a gap on the same plane and electrode 30 faces electrode 31 in the same manner.
6. Regarding claim 13, note that the gap of the first group overlap the gap of the second group.
7. Regarding claim 16, the limitation is anticipated as explained above and shown in the figure.
8. Regarding claim 19, Asakura discloses a lamination-type resistance element (**41**, as shown above in figure 2) comprising:

a laminated sinter having a plurality of ceramic resistance layers (**22**) and a plurality of internal electrodes (**28-31, 23-24, 42-45**) laminated therein; and

a first external electrode (**26**) and a second external electrode (**27**) provided on the outer surface of the laminated sinter; wherein

the internal electrodes include internal electrodes of a first group (**A**) and internal electrodes of a second group (**B**);

each of the internal electrodes of the first group includes a first internal electrode connected to the first external electrode (**28 and 30** connected to **26**) (and a second internal electrode connected to the second external electrode **29** and **31** connected to **27**) which face each other through the ceramic resistance layer (**28** faces **30** and **29** faces **31**)

each of the internal electrodes of the second group (B) includes a third internal (44) electrode and a fourth internal electrode (45) in which a first end of third internal electrode faces a first end of the fourth internal electrode with a gap therebetween on the same plane inside the laminated sinter (C – refer to the figure above), and second ends are connected to the first external electrode (26) and the second external electrode (27), respectively, and the gaps between the third internal electrodes and fourth internal electrodes are at the same location along the lamination direction of the laminated sinter (gap C overlaps in the lamination direction); and

an end of the internal electrode of the first group that is arranged closest to the second group overlaps (end of electrode 30), in the lamination direction of the laminated sinter, with the first end of one of the third (end of electrode 44) and fourth internal electrodes that is arranged closest to the first group.

9. Regarding claim 20, the gaps between the first ends of each of the plurality of pairs of the internal electrodes of the second group overlap with each other in the lamination direction as required.

*Allowable Subject Matter*

10. Claims 17 and 18 allowed.

11. Claims 14 and 15 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The references of the Prior Art of Record fail to teach or suggest either alone or in obvious combination the limitations as set forth in claims 17 and 18, and specifically comprising the limitation of *the gaps being formed at different locations when seen from the lamination direction of the laminated sinter* (claims 14 and 17), *and the no-connection-type internal electrode which is arranged to lie on top of the first internal electrode and the second internal electrode through the ceramic resistance layer in the lamination direction of the sinter and which is not connected to the external electrodes* (claims 15 and 18).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. SanMartin whose telephone number is (571)272-2018. The examiner can normally be reached on M-Th 9-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Benson can be reached on 571-272-2227. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jaydi SanMartin/  
Primary Examiner, Art Unit 2837

8/26/2009